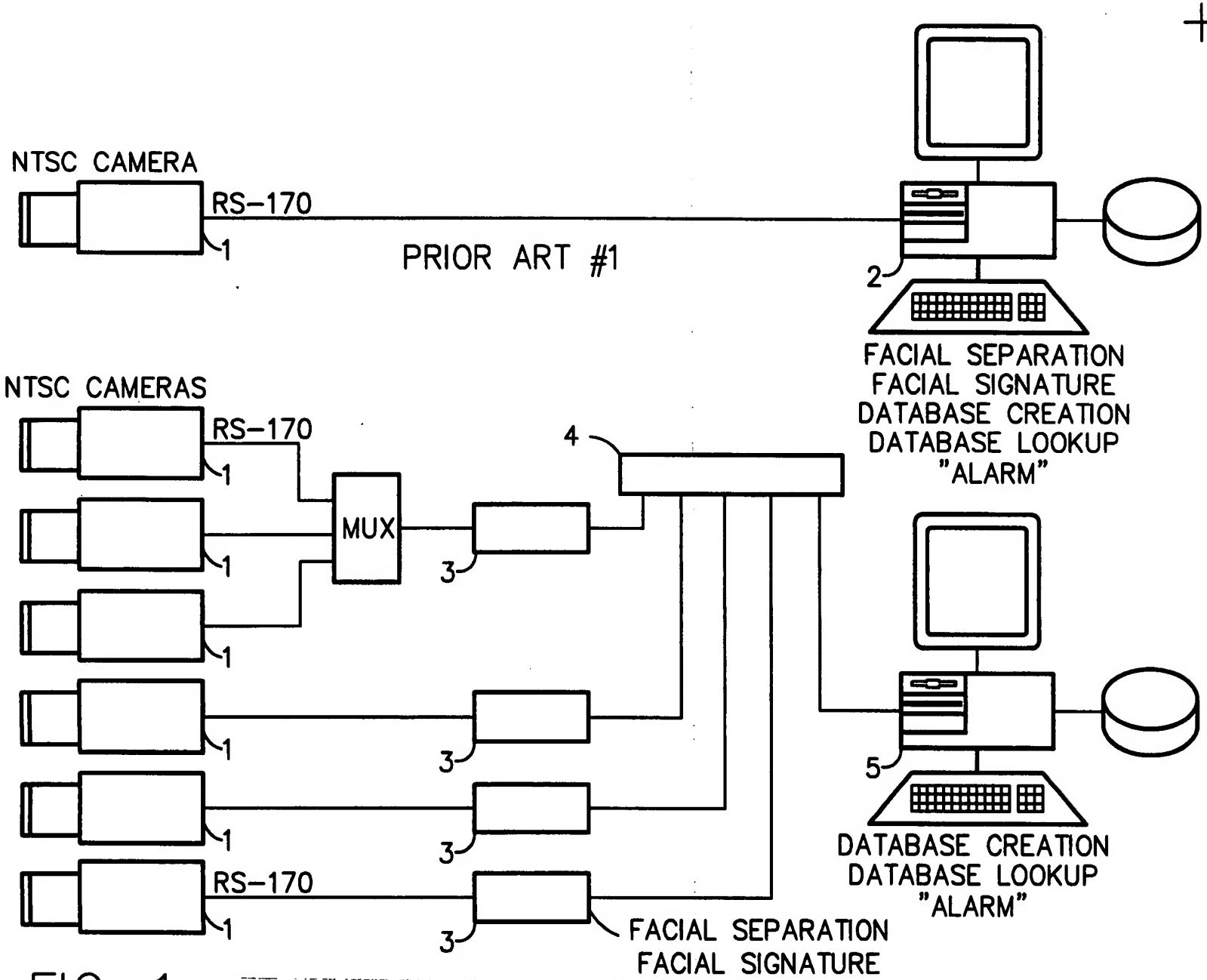

NTSC CAMERA
RS-170
1
PRIOR ART #1
2
FACIAL SEPARATION
FACIAL SIGNATURE
DATABASE CREATION
DATABASE LOOKUP
"ALARM"
NTSC CAMERAS
RS-170
1
MUX
3
4
RS-170
FACIAL SEPARATION
FACIAL SIGNATURE
5
DATABASE CREATION
DATABASE LOOKUP
"ALARM"

FIG. 1

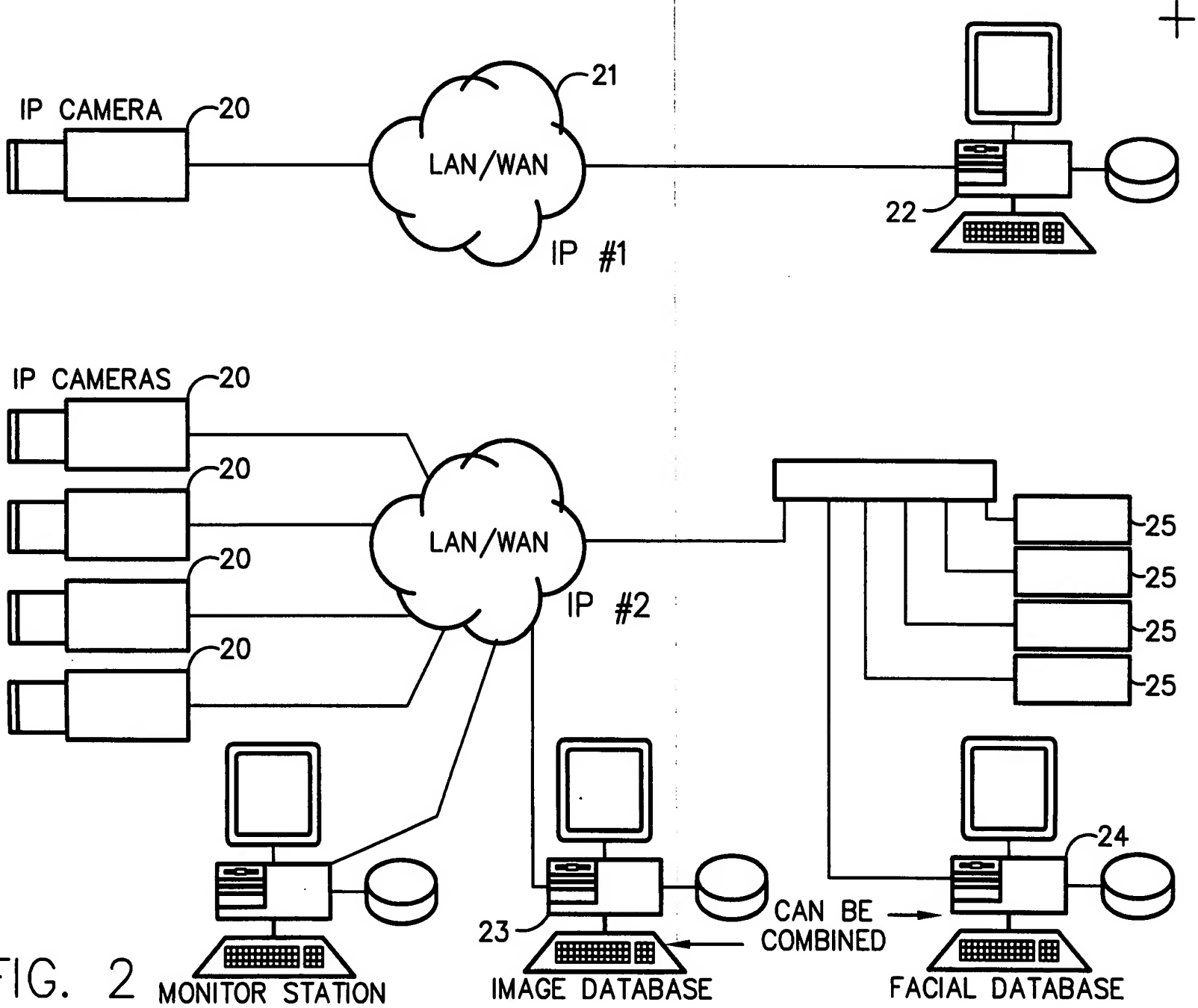

IP CAMERA
20
LAN/WAN
21
IP #1
22
IP CAMERAS
20
20
20
20
LAN/WAN
IP #2
25
25
25
25
24
CAN BE
COMBINED
23
MONITOR STATION
IMAGE DATABASE
FACIAL DATABASE

FIG. 2

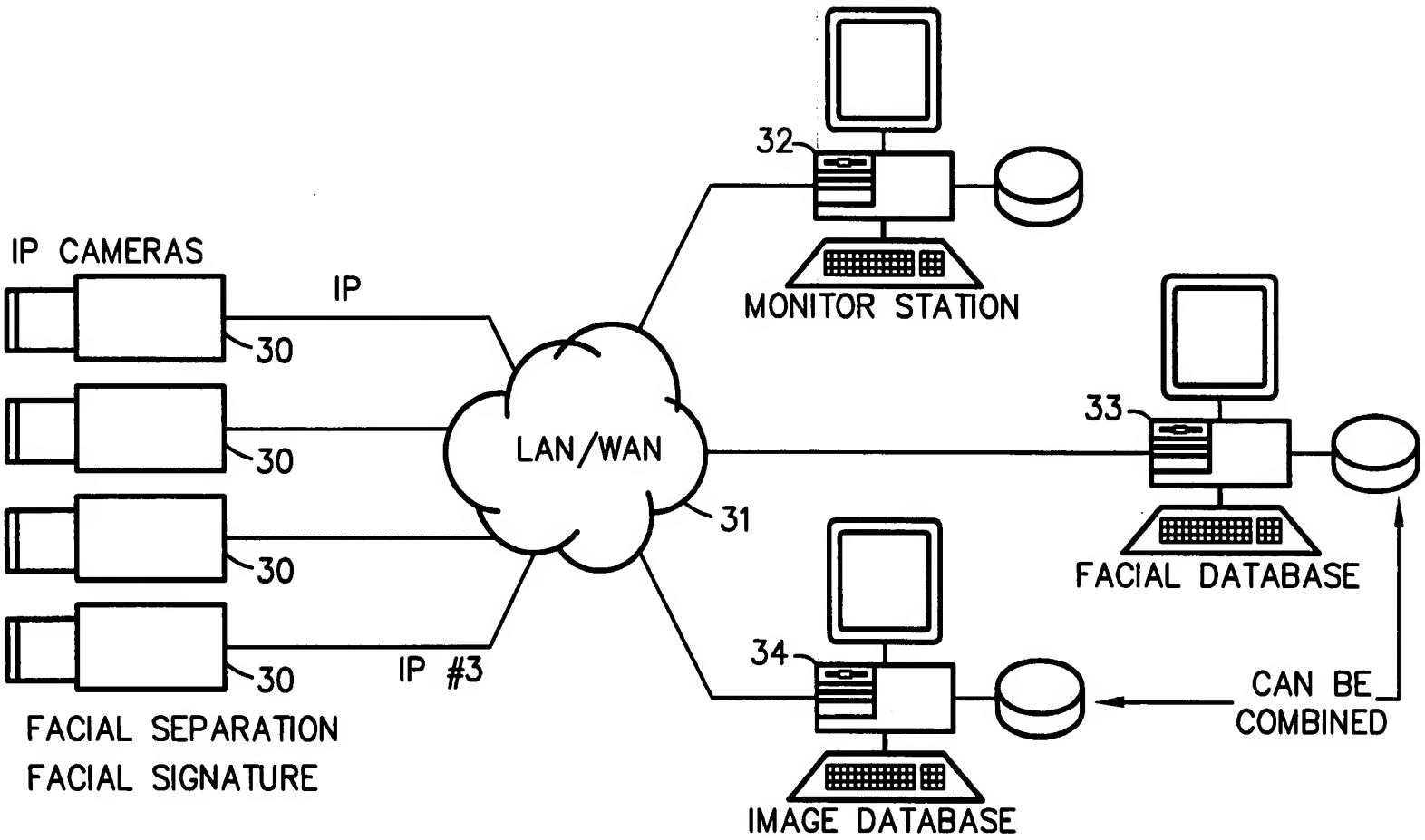

IP CAMERAS
IP
30
30
30
30
LAN/WAN
31
IP #3
FACIAL SEPARATION
FACIAL SIGNATURE
32
MONITOR STATION
33
FACIAL DATABASE
34
IMAGE DATABASE
CAN BE
COMBINED

FIG. 3

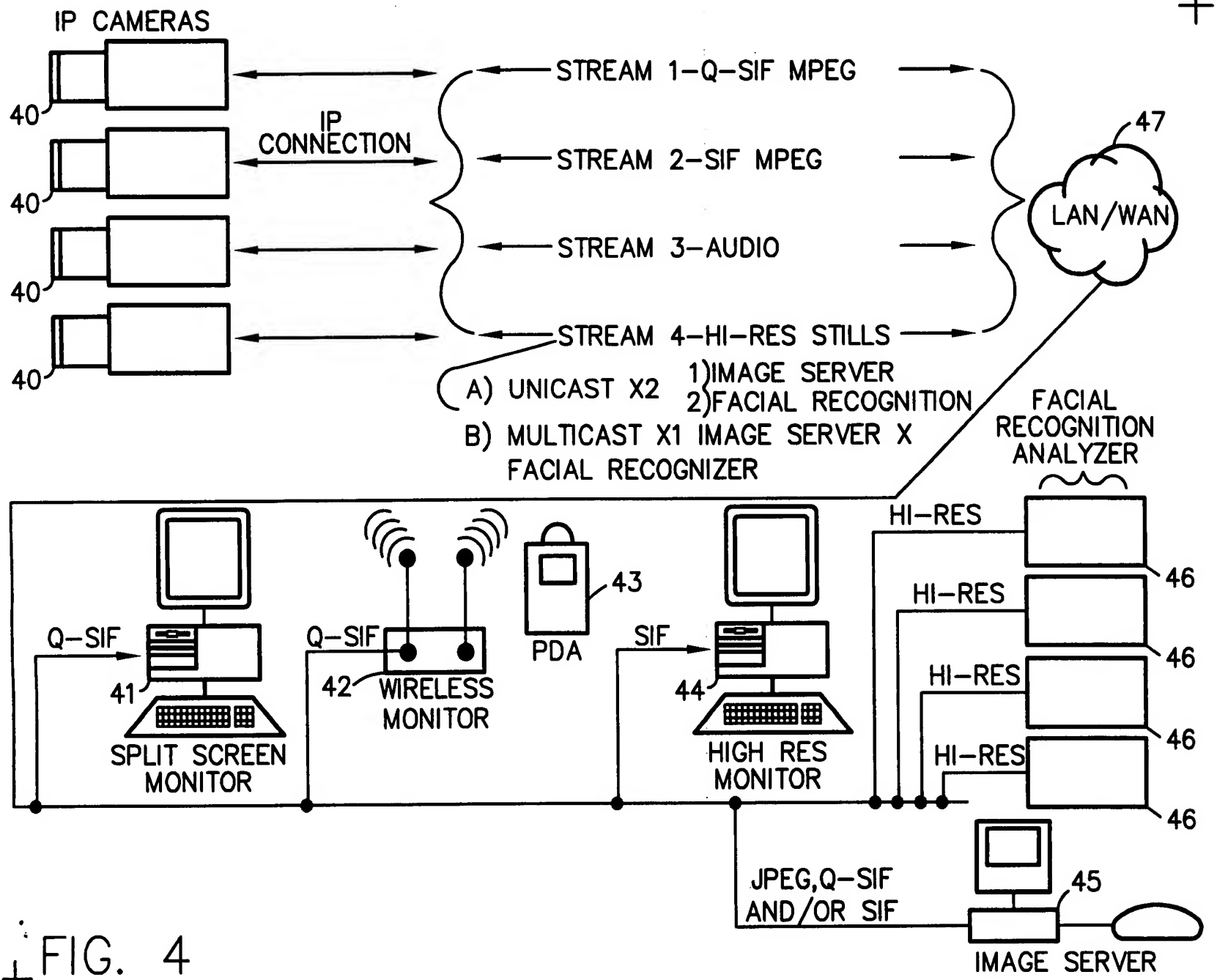

IP CAMERAS
40
40
40
40
IP CONNECTION
STREAM 1-Q-SIF MPEG
STREAM 2-SIF MPEG
STREAM 3-AUDIO
STREAM 4-HI-RES STILLS
47
LAN/WAN
A) UNICAST X2
1)IMAGE SERVER
2)FACIAL RECOGNITION
B) MULTICAST X1 IMAGE SERVER X
FACIAL RECOGNIZER
FACIAL RECOGNITION ANALYZER
HI-RES
HI-RES
HI-RES
HI-RES
46
46
46
46
Q-SIF
41
SPLIT SCREEN MONITOR
Q-SIF
42
WIRELESS MONITOR
43
PDA
SIF
44
HIGH RES MONITOR
JPEG,Q-SIF AND/OR SIF
45
IMAGE SERVER

FIG. 4

IMAGE DATABASE

IMAGE ID#	DATE/TIME
	LOCATION
	CAMERA #
	IMAGE FILE URL
	DETECTED FACIAL SIGNATURE #1
	DETECTED FACIAL SIGNATURE #2
	DETECTED FACIAL SIGNATURE #3
	" " "
	" " "
	DETECTED FACIAL SIGNATURE #LAST

SIGNATURE DATABASE

FACIAL SIGNATURE#	NAME
	AGE
	HEIGHT
	ALIASES
	MUGSHOT URL
	BIO FILE URL
	IMAGE ID #1
	IMAGE ID #2
	IMAGE ID #3
	" "
	" "
	IMAGE ID #LAST

FIG. 5

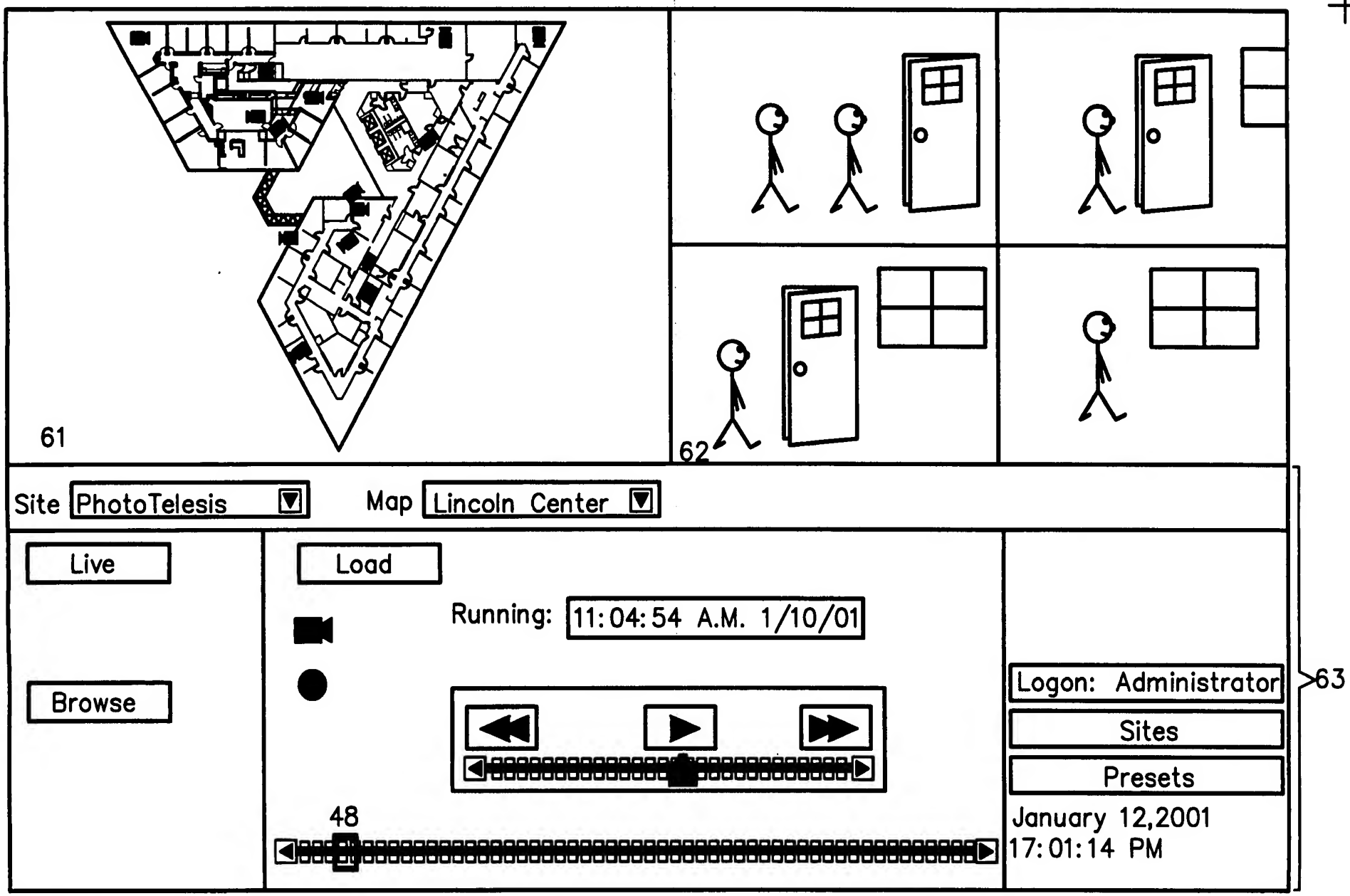

61
62
Site
PhotoTelesis
Map
Lincoln Center
Live
Load
Running:
11:04:54 A.M. 1/10/01
Browse
48
Logon: Administrator
Sites
Presets
January 12,2001
17:01:14 PM
63

FIG. 6

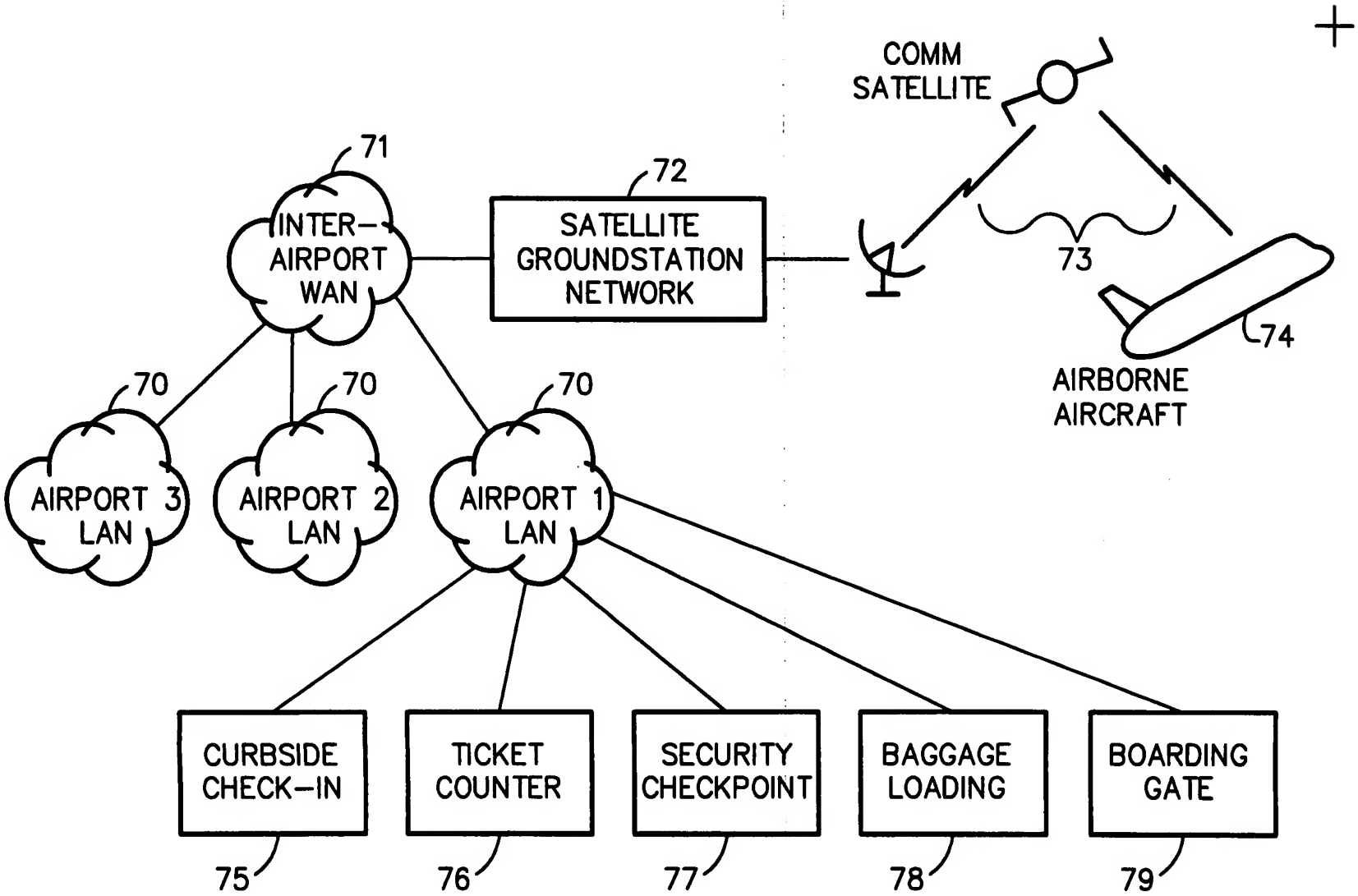

COMM
SATELLITE
71
INTER–
AIRPORT
WAN
72
SATELLITE
GROUNDSTATION
NETWORK
73
74
AIRBORNE
AIRCRAFT
70
70
70
AIRPORT 3
LAN
AIRPORT 2
LAN
AIRPORT 1
LAN
CURBSIDE
CHECK–IN
TICKET
COUNTER
SECURITY
CHECKPOINT
BAGGAGE
LOADING
BOARDING
GATE
75
76
77
78
79

FIG. 7

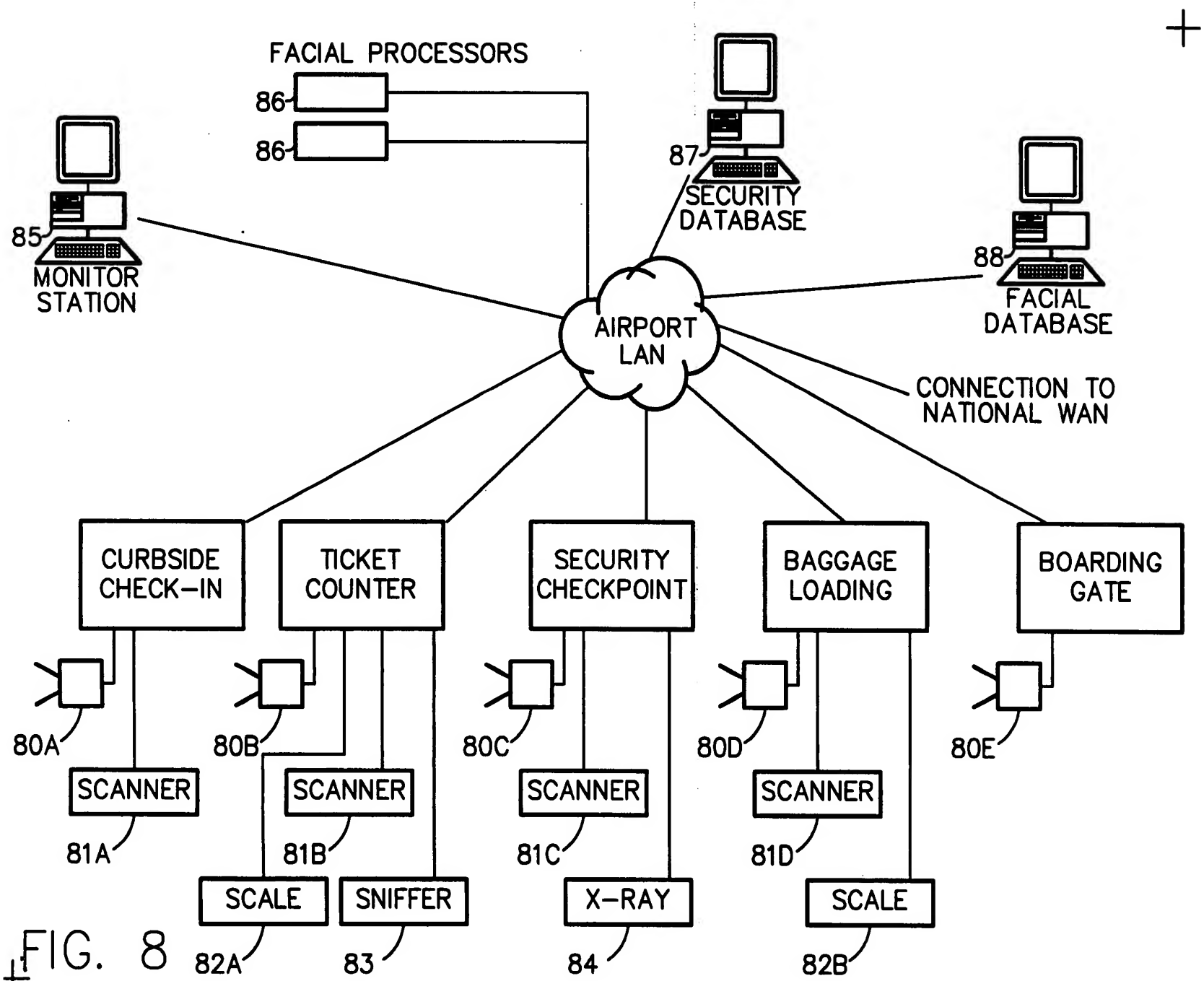

FACIAL PROCESSORS
86
86
87
SECURITY DATABASE
85
MONITOR STATION
88
FACIAL DATABASE
AIRPORT LAN
CONNECTION TO NATIONAL WAN
CURBSIDE CHECK-IN
TICKET COUNTER
SECURITY CHECKPOINT
BAGGAGE LOADING
BOARDING GATE
80A
80B
80C
80D
80E
SCANNER
SCANNER
SCANNER
SCANNER
81A
81B
81C
81D
SCALE
SNIFFER
X-RAY
SCALE
82A
83
84
82B

FIG. 8

DATA CAPTURED INTO SECURITY DATABASE

- PASSENGER IMAGE
- BAGGAGE IMAGE
- PASSENGER FACIAL SIGNATURE
- BAGGAGE WEIGHT
- PHOTO ID IMAGE
- PHOTO ID FACIAL SIGNATURE
- IMAGE OF TICKETS

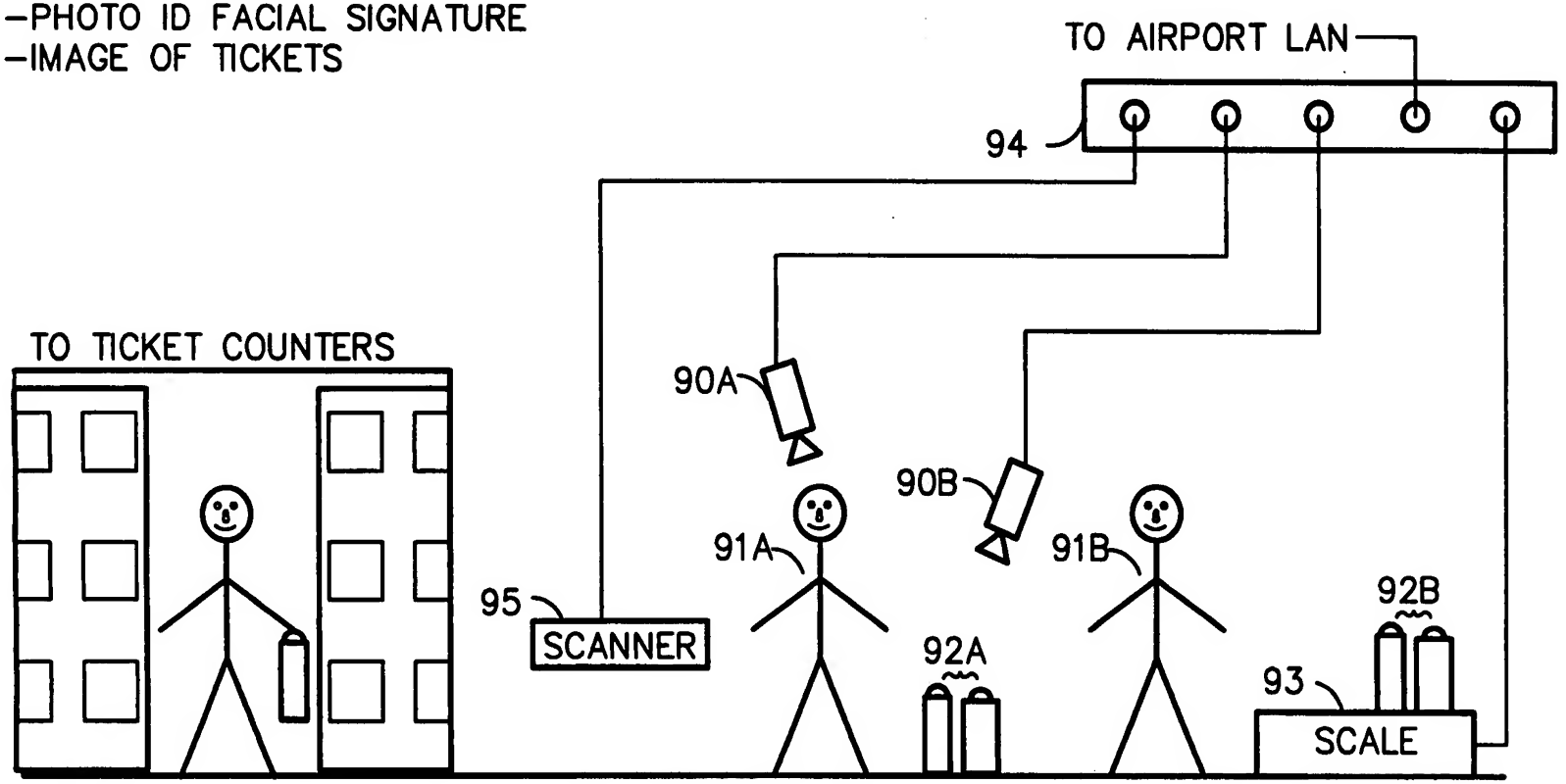
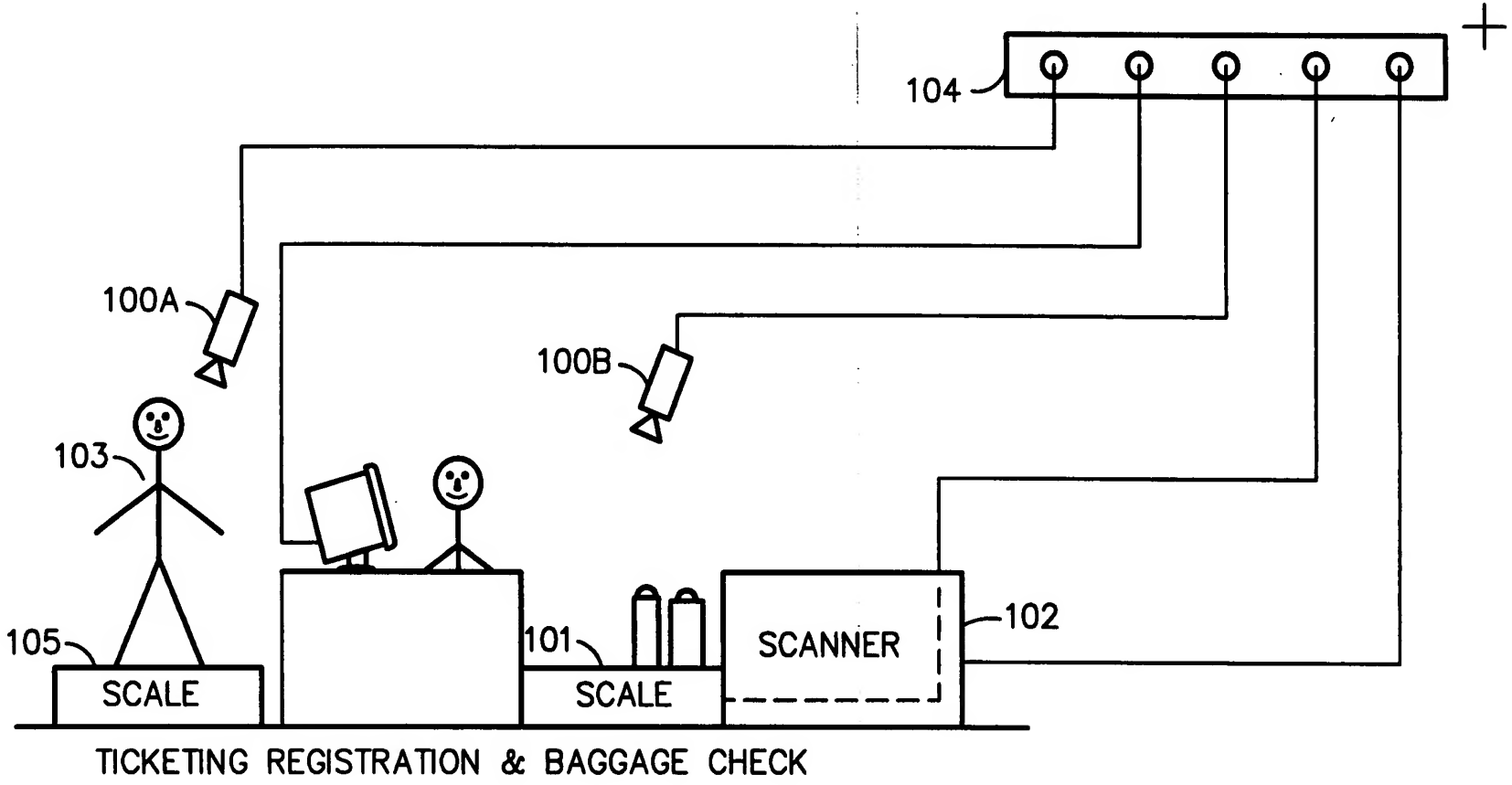


FIG. 9



DATA CAPTURED INTO SECURITY DATABASE

- PASSENGER IMAGE
- BAGGAGE IMAGE
- PASSENGER FACIAL SIGNATURE
- BAGGAGE WEIGHT
- PHOTO ID IMAGE
- PHOTO ID FACIAL SIGNATURE
- IMAGE OF TICKETS
- EXPLOSIVES SCANNER DATA

FIG. 10

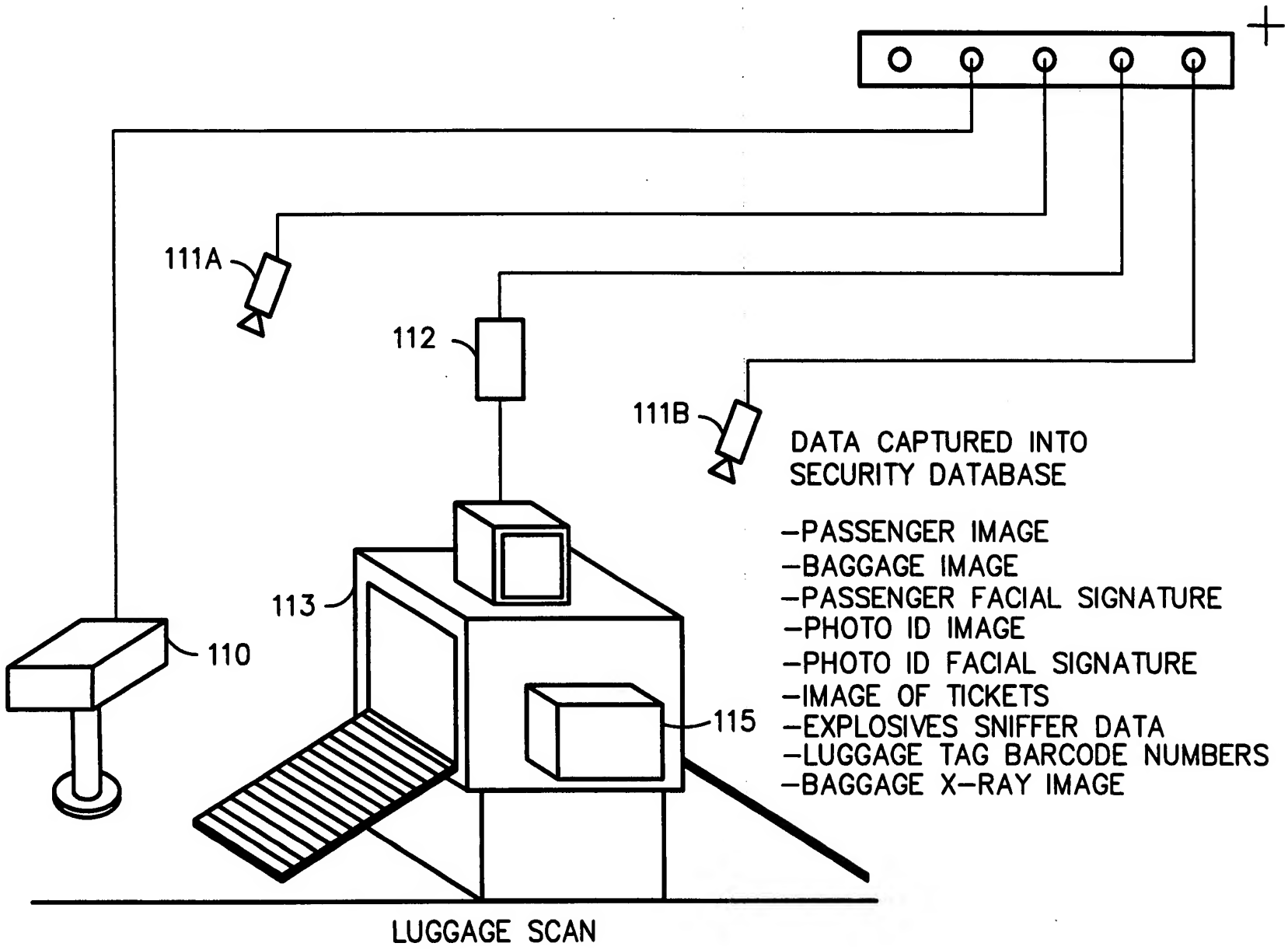

111A
112
111B
DATA CAPTURED INTO
SECURITY DATABASE
-PASSENGER IMAGE
-BAGGAGE IMAGE
-PASSENGER FACIAL SIGNATURE
-PHOTO ID IMAGE
-PHOTO ID FACIAL SIGNATURE
-IMAGE OF TICKETS
-EXPLOSIVES SNIFFER DATA
-LUGGAGE TAG BARCODE NUMBERS
-BAGGAGE X-RAY IMAGE
113
110
115
LUGGAGE SCAN

FIG. 11

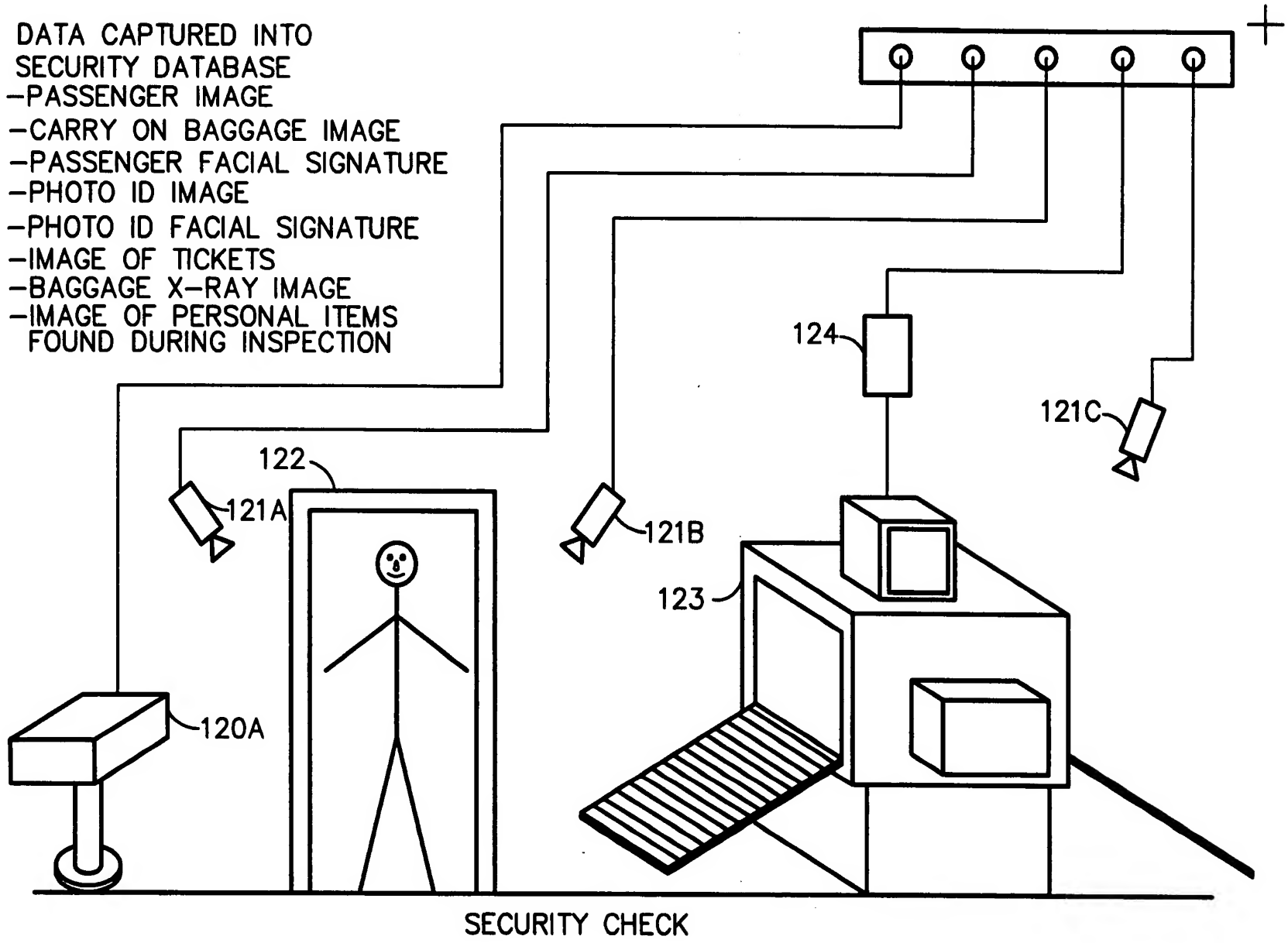

DATA CAPTURED INTO
SECURITY DATABASE
–PASSENGER IMAGE
–CARRY ON BAGGAGE IMAGE
–PASSENGER FACIAL SIGNATURE
–PHOTO ID IMAGE
–PHOTO ID FACIAL SIGNATURE
–IMAGE OF TICKETS
–BAGGAGE X–RAY IMAGE
–IMAGE OF PERSONAL ITEMS
FOUND DURING INSPECTION
124
121C
122
121A
121B
123
120A
SECURITY CHECK

FIG. 12

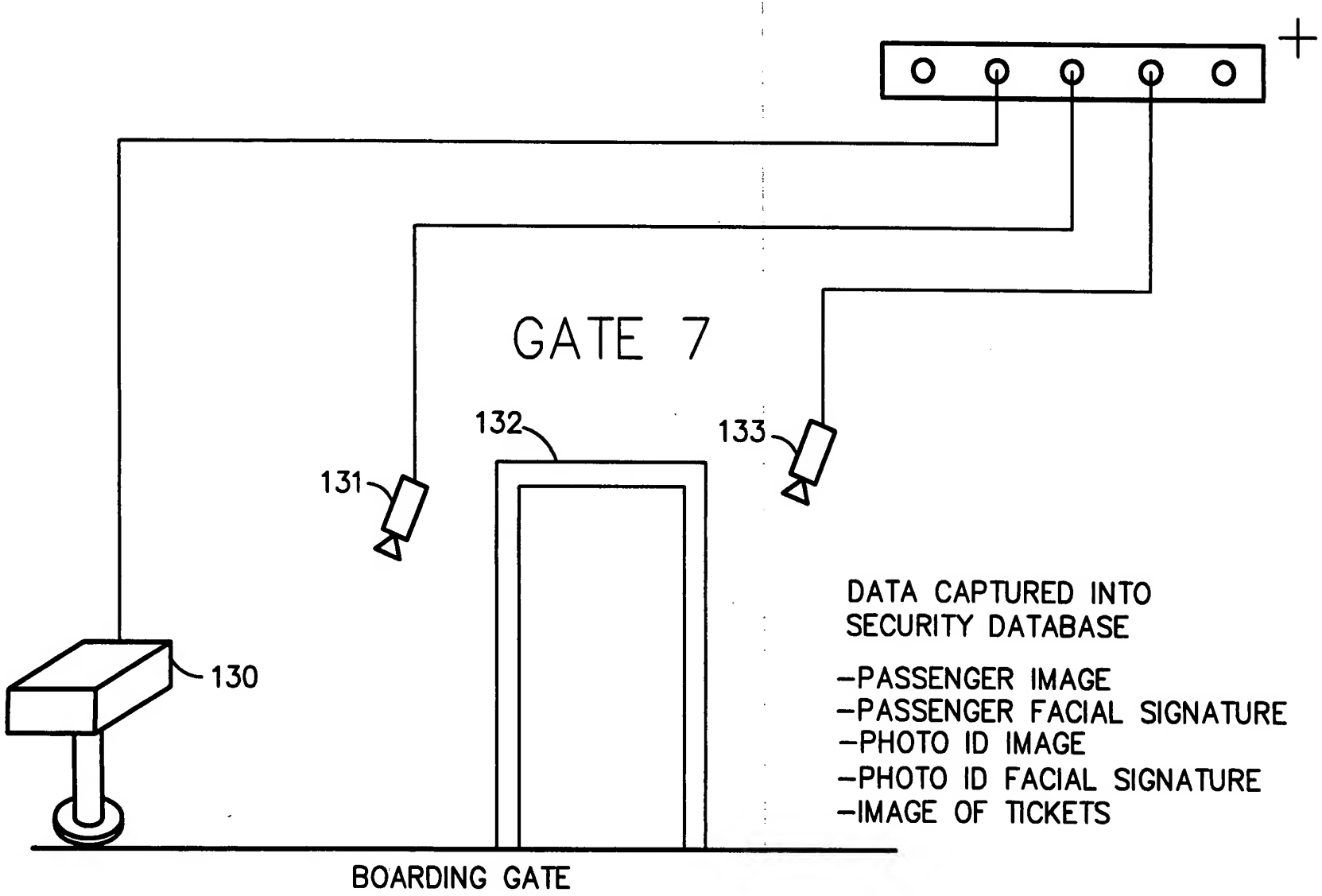
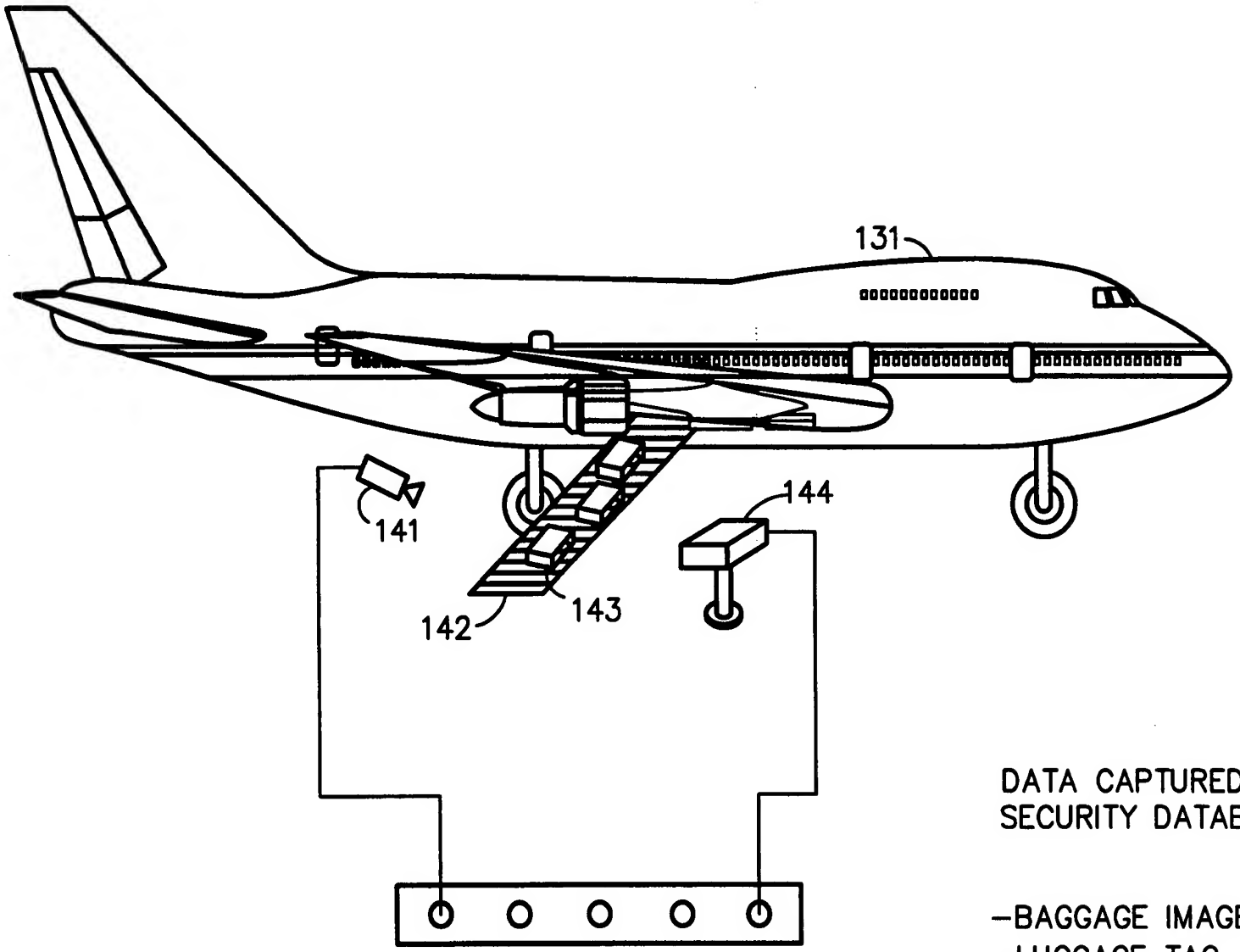

GATE 7
132
131
133
130
DATA CAPTURED INTO
SECURITY DATABASE
-PASSENGER IMAGE
-PASSENGER FACIAL SIGNATURE
-PHOTO ID IMAGE
-PHOTO ID FACIAL SIGNATURE
-IMAGE OF TICKETS
BOARDING GATE

FIG. 13



DATA CAPTURED INTO SECURITY DATABASE

- BAGGAGE IMAGE
- LUGGAGE TAG BARCODE NUMBERS

FIG. 14

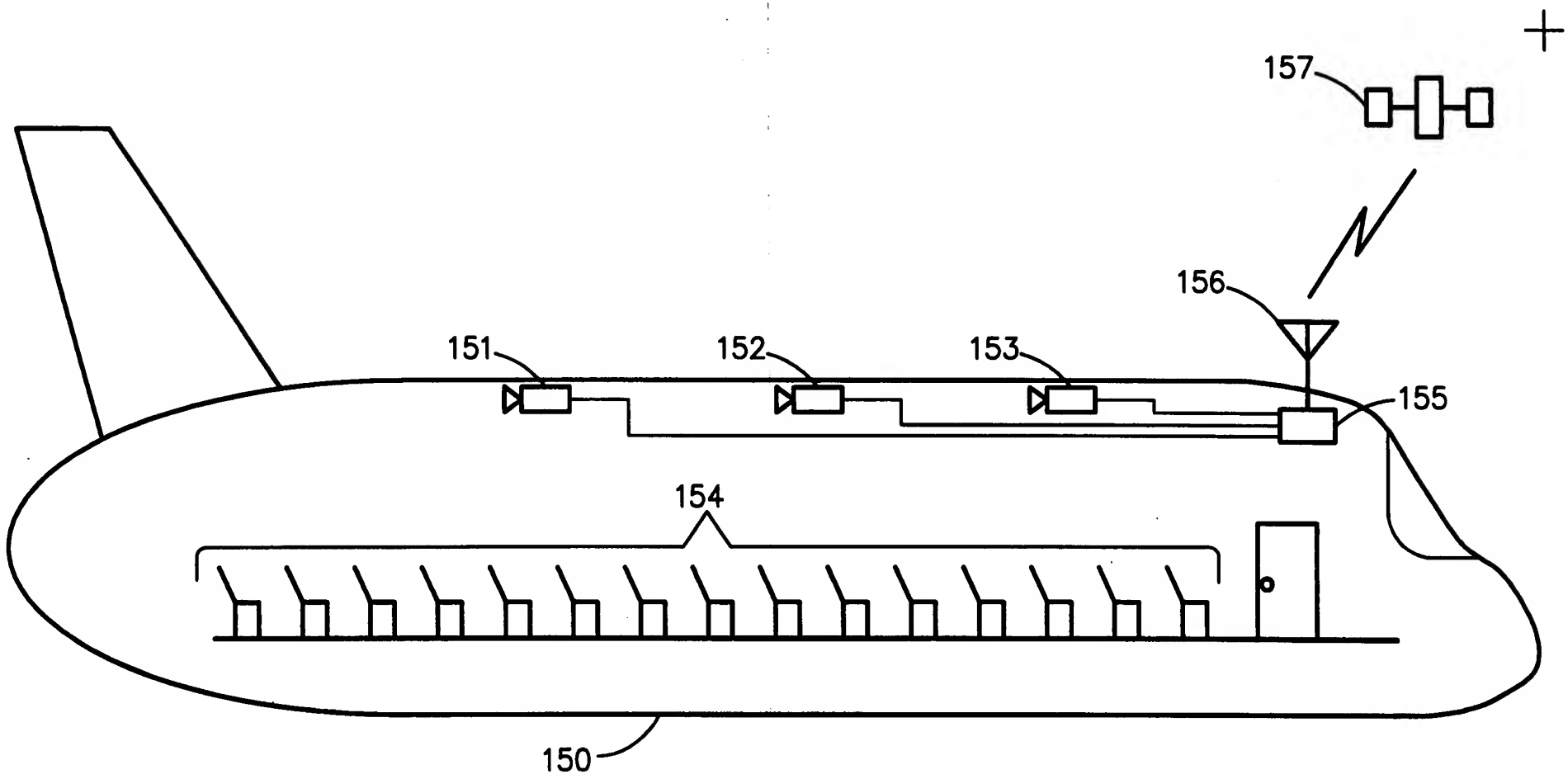


FIG. 15